

We Claim:

1. An edible oil that reduces the synthesis, absorption and blood level of cholesterol by a human patient and increases the excretion of cholesterol from said human patient.
2. The edible oil of Claim 1 which comprises at least one compound that reduces cholesterol absorption in said human patient.
3. The edible oil of Claim 1 which comprises at least one compound that reduces cholesterol synthesis by said human patient.
4. The edible oil of Claim 1 which comprises at least one compound that increases cholesterol excretion from said human patient.
5. The edible oil of Claim 1 which is substantially free of trans fatty acids.
6. The edible oil of Claim 1 which attenuates the blood level of peroxides.
7. The edible oil of Claim 1 which provides at least one compound in the oil that limits the formation and accumulation of TBARS in hypercholesterolemic human subjects.
8. The edible oil of Claim 1 which provides increased levels of tocopherol or tocotrienol antioxidant activity to the blood, and other tissues, of human subjects.
9. The edible oil of Claim 1 which significantly decreases the blood level of total cholesterol, LDL cholesterol and triglyceride/HDL cholesterol in a

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hypercholesterolemic human subject, with blood cholesterol in excess of 5.6 $\mu\text{mol./L.}$

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10. The edible oil of Claim 1 which significantly increases the blood level of HDL cholesterol, expresses as the ratio of blood HDL cholesterol/total cholesterol, in hypercholesterolemic subjects.
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11. The edible oil of Claim 1 which lowers the blood level of peroxides, measured as TBARS, in hypercholesterolemic subjects.
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12. The edible oil of Claim 1 which significantly raises the blood level of vitamin E activity in hypercholesterolemic human subjects.
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13. A food product comprising the oil of Claim 1.
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14. The food product of Claim 13 which is selected from the group consisting of butter, margarine, ice cream and mayonnaise.
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15. The food product of Claim 13 which is a chocolate product.
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16. The food product of Claim 13 which is a liquid.
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17. The food product of Claim 13 which is selected from the group consisting of milk, soybean milk and rice milk.
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18. The food product of Claim 13 which is a water-based drink.
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19. The food product of Claim 13 which is selected from the group consisting of wines and mineral waters.
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20. The edible oil of Claim 1 which is a vegetable oil or mixture of vegetable oils.
21. The edible oil of Claim 1 which is a refined rice bran oil.
- 5 22. The edible oil of Claim 1 which is a mixture of rice bran oil and a palm oil.
23. A soft gel including a fill comprising the edible oil of Claim 1.
- 10 24. An edible oil comprising i) about 10 to 30% of tocopherols, tocotrienols or combinations thereof, ii) about 2 to 20% of free sterols; iii) about 2 to 20% of sterol esters; iv) about 0.1 to 1.0% of cycloartenols; and, v) about 7 to 19% of saturated fats, wherein all percentages are weight/weight.
- 15 25. The edible oil of Claim 24 comprising about 70 to 80% of total fats.
26. The edible oil of Claim 24 comprising less than 2% trans fatty acids.
- 20 27. The edible oil of Claim 24 comprising about 20 to 60% of non-saponifiable components.
28. The edible oil of Claim 24 which is a vegetable oil or a mixture of vegetable oils.
- 25 29. The edible oil of Claim 24 which is a refined rice bran oil.
30. The edible oil of Claim 24 which is a mixture of a rice bran oil and a palm oil.
31. A food product comprising the oil of Claim 24.

- 5 32. An edible oil comprising about 20 to 60% of non-saponifiable components, said non-saponifiable components comprising (i) at least one tocotrienol or tocopherol, (ii) at least one free sterol or sterol ester, and iii) at least one cycloartenol, wherein the ratio of the amounts of said components i): (ii): (iii) is from about 1:0. 5:0.05 to about 1:5:0.05.
33. The oil of Claim 33 wherein said ratio is about 1:1: 0.05.
- 10 34. A method of reducing total serum cholesterol and serum LDL cholesterol and raising serum HDL cholesterol in a human patient comprising the step of administering to said patient an effective amount of the edible oil of Claim 1.
35. The method of Claim 34 which also reduces the blood triglyceride level in a human patient.
- 15 36. The method of Claim 34 wherein said oil is administered in the form of a food product.
37. The method of Claim 34 wherein said oil is administered in an amount from about 1 to 10 mg per kg of body weight per day to said patient.
- 20 38. The method of Claim 34 wherein total serum cholesterol is decreased by about 5 to 25%.
39. The method of Claim 34 wherein serum LDL cholesterol is decreased by about 5 to 25%.
- 25 40. The method of Claim 34 wherein serum HDL cholesterol is raised by about 10 to 30%.

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41. The method of Claim 34 wherein the ratio of HDL to total cholesterol in said human patient is raised from about 10 to 30%.
- 5 42. The method of Claim 34 wherein the serum level of peroxides, measured as TBARS, is decreased by about 10% to 60%.
43. The method of Claim 34 wherein the serum level of tocopherol or tocotrienol is raised by 20% to 110%.
- 10 44. A method of decreasing total blood cholesterol in a human patient, by administering to said patient an effective amount of an edible oil that decreases the synthesis, absorption and blood level of cholesterol by said human patient and increases the excretion of cholesterol from said human patient.
- 15 45. The method of Claim 44 wherein said oil comprises at least one compound that decreases cholesterol synthesis in said human patient.
- 20 46. The method of Claim 44 wherein said oil comprises at least one compound that increases cholesterol excretion from said human patient.
- 25 47. The method of Claim 44 wherein said oil comprises a mixture of (i) at least one tocotrienol or tocopherol; (ii) at least one free sterol or sterol ester; (iii) at least one cycloartenol.
- 30 48. The mixture of Claim 47 wherein the ratio of ingredients (i) - (iii) of said mixture effectively decreases the absorption, synthesis and blood levels of cholesterol by a human patient and also increases the excretion of cholesterol from said human patient.

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- 5 49. A method of making an anti-cholesterolemic edible oil comprising the steps of
a) providing an edible oil, and b) adjusting the content of tocopherols,
tocotrienols, free sterols, sterol esters and cycloartenols of said edible oil,
such that said oil comprises about (i) 10 to 30% of tocopherols, tocotrienols
or combinations thereof, (ii) about 2 to 20% of free sterols; (iii) about 2 to
20% of sterol esters; (iv) about 0.1 to 1.0% of cycloartenols, wherein all
percentages are weight/weight.
- 10 50. The method of Claim 49 wherein in step a) said edible oil includes at least one
saturated fat, and in step b) the content of saturated fat of said edible oil is
adjusted such that said edible oil comprises about 7 to 19% of saturated fat.
- 15 51. The method of Claim 49 wherein after step a) said edible oil is substantially
free of trans fatty acids.